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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,976	03/10/2004	Michael Ladwig	3351-028A	2277
23429 7590 05/28/2008 LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER				
PERUNGAVOOR, SATHYANARAYA V				
ART UNIT		PAPER NUMBER		
2624				
MAIL DATE		DELIVERY MODE		
05/28/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/795,976

**Applicant(s)**

LADWIG ET AL.

**Examiner**

SATH V. PERUNGAVOOR

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Applicant(s) Response to Official Action***

- [1] The response filed on October 25, 2007 has been entered and made of record.

### ***Declaration under 37 C.F.R 1.132***

- [2] The declaration under 37 CFR 1.132 filed on October 25, 2007 is insufficient to overcome the rejection of claims 1-19 based upon Stalcup et al. ("Stalcup") [US 6,741,743 B2] as set forth in the last Office action because:

1. The declaration does not explicitly correlate the subject matter disclosed in Stalcup with the inventor who invented that subject matter.
  - a. This is critical, since there is a WIPO publication for Stalcup (WO 00/10118) which would be eligible under 102(b), if any of the disclosed but not claimed subject matter is not by Bruce Stalcup.
2. Hence, at least the following is required:
  - a. An unequivocal statement that the material the examiner is relying upon is SOLELY the work of the inventor(s) making the declaration.
  - b. Derivation must be PROVED by showing prior invention and then disclosure to the alleged deriver.

### ***Claim Rejections - 35 USC § 102/103***

- [3] Claims 1-19 are rejected as per discussion in the previous non-final office action (mailed on 07/25/2007), which is incorporated herein by reference.

[4] Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stalcup in view of Burke et al. ("Burke") [US 6,351,660 B1].

Regarding claim 20, Stalcup meets the claim limitations as set forth in claim 1.

Stalcup does not explicitly disclose the following claim limitations:

The method according to claim 1, wherein comparing compensated images against images in a database includes: performing a Fast Fourier Transform (FFT) on the compensated image, moving the compensated image from the spatial to frequency domain; performing an FFT on a search target image; multiplying the FFT of the image to be searched by the FFT of the search target image to produce a correlation plane; performing an inverse FFT of the correlation plane, converting the correlation plane from the frequency domain to a spatial specification to produce a similarity matrix for search pattern locations within the target image; and applying a threshold to the similarity matrix to extract location of matches above the threshold.

However, in the same field of endeavor Burke discloses the deficient claim limitations, as follows:

The method according to claim 1, wherein comparing compensated images against images in a database includes: performing a Fast Fourier Transform (FFT) on the compensated image (*i.e. source image*), moving the compensated image from the spatial to frequency domain [*col. 11, ll. 14-30*]; performing an FFT on a search target image (*i.e. filter image*) [*col. 11, ll. 14-30*]; multiplying (*i.e. comparing*) the FFT of the image to be searched by the FFT of the search target image to produce a correlation plane [*col. 11, ll. 14-30*]; performing an inverse FFT of the correlation plane,

converting the correlation plane from the frequency domain to a spatial specification to produce a similarity matrix (*i.e. correlation pattern*) for search pattern locations within the target image [*col. 11, ll. 14-30*]; and applying a threshold to the similarity matrix to extract location of matches above the threshold [*col. 9, ll. 1-10*].

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Stalcup with Burke and use an optical correlator, the motivation being the speed in performing the correlation [*col. 11, 14-30*].

- [5] Claim 21 is rejected as per claim 7.

### **Conclusion**

- [6] **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

[7] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Matthew C. Bella whose telephone number is (571) 272-7778, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dated: May 28, 2008

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